

## Transform Self-Checkout integration, performance, reliability & serviceability

### Key Benefits

With the self-checkout (SCO) application operating on modern local, secure and resilient infrastructure, Zynstra Virtualized Self-Checkout provides a flexible infrastructure for the optimization of SCO investment. Management and maintenance becomes quicker, easier and more cost effective and enhanced security is applied.

#### Increased Return on Investment

- *Extends life of existing SCO and terminal hardware indefinitely. Hardware and software life-cycles are separated, allowing operating system and application upgrades to be applied without the need for hardware replacement*
- *Reduced cost of integrating SCO with existing front and back office solutions, and reduced support costs through powerful centralized management and control*
- *Comprehensive peripheral support. Much of the complexity of SCO solutions lies in the array of 20 or more peripherals- from note dispensers to scales - that are integrated into every solution. Zynstra's virtualized solution supports the array of existing and future peripheral appliances that SCO demands, again allowing for cost effective upgrades and extended ROI, and avoids end of life issues arising from vendor support decisions (e.g. Microsoft)*

#### Increased Reliability & Reduced Risk

- *Enhanced PCI-DSS features to reduce the cost and effort to achieve compliance across SCO implementations*
- *High availability options to further reduce risk*
- *Centralized management of all in-store SCO, with control of patches and updates*
- *Enables multiple versions of SCO to be managed in a consistent fashion*

#### Enhanced Customer Service

- *Improves transactional performance of SCO tills/ registers*
- *Provides flexible platform for adaptation to new advances in the rapidly developing world of SCO (barcode, RFID, Amazon Go)*
- *Cost effective platform for future applications to enhance customer experience and deliver new lines of business*

Business and market drivers are leading retailers to strive to cut costs and make the checkout process as frictionless and easy as possible for their customers, particularly in the grocery and related sectors. This in turn is increasing the move towards self-checkout registers/tills, where customers scan and pay for their goods without the assistance of an associate. However, self-checkout (SCO) terminals can present challenges in terms of optimizing return on investment, integration costs, and keeping pace with rapid developments in this technology. Zynstra Virtualized Self-Checkout - moving the SCO application and operating system from the terminal hardware to a shared infrastructure virtual machine – addresses these challenges and changes the long-term investment economics of SCO.

### Virtualized Self-Checkout Challenges

SCO solutions require significant investment, represent an ever-increasing proportion of store revenue flows, and play a key role in the overall customer experience. Not surprising then that retailers are searching for ways in which they can improve customer satisfaction, reduce risk and control the cost of these solutions. Virtualization of SCO terminal software provides real cost and business flexibility benefits that can help retailers in maximizing their return on investment.

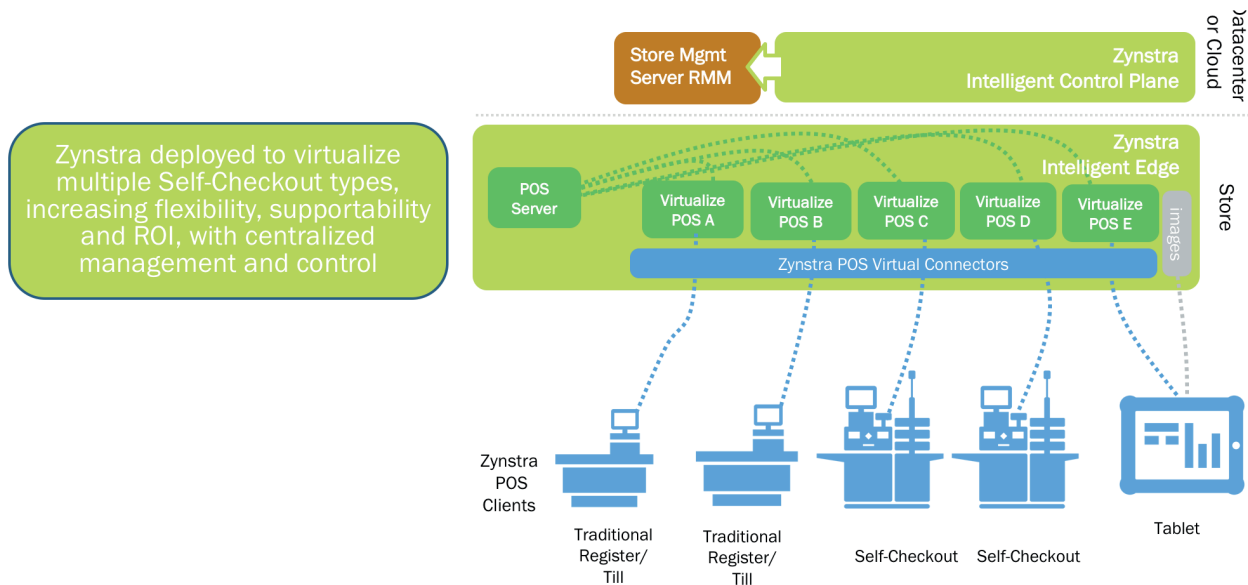
**Controlling Cost** requires that the maximum return is gained from investment in SCO terminals and associated peripherals, by ensuring that end of life/end of support scenarios enforced by suppliers are negated, and that new services can be applied without forklift replacement of existing solutions.

**Reducing Risk** requires that SCO virtualization be implemented in a secure and PCI-DSS compliant manner, and that reliable and high-availability solutions are required to avoid down time.

**Improving Customer Service** requires optimizing SCO transaction speed, ensuring availability, and providing flexibility to constantly adapt to advances in this dynamic area of technology.

## Zynstra Virtualized Self-Checkout

Zynstra's **Virtualized Self-Checkout** solution virtualizes the combination of SCO application software and operating system on a standard server. Virtualization removes the SCO application from the edge device and peripheral interaction is no longer possible. A Linux operating system is run on a SCO with sufficient software to re-connect all required peripherals to the new virtualized POS application. The software interacts with the user through the screen of the SCO, presenting the application as it appeared before virtualization. This maximizes the ROI from past SCO investments, reduces the IT bill of materials, and minimizes staff training costs.



The solution supports all required peripherals such as printers, magnetic stripe readers (MSR) and barcode scanners.

Security is paramount in SCO implementations. Zynstra delivers a PCI-DSS compliant solution for all virtualized devices

## Zynstra Software

Zynstra offers a complete software suite (See Zynstra Retail Edge Software Suite) that comprises of three integrated components: Intelligent Edge software, as a platform for reduced cost to serve in store, Intelligent Control Plane for management, control and innovation, and the Intelligent Edge Client that provides secure connectivity for users and peripherals to virtualized applications be they Point Of Sale, customer-facing or back-office workloads running on a Zynstra Intelligent Edge. It reduces the in-store IT bill of materials and operating costs significantly, while delivering a platform for continuous innovation. All of this is provided with PCI-DSS conformance built in.

Zynstra's Virtualized Self-checkout solution leverages our existing POS investments to transform SCO integration, performance, reliability and serviceability. Our fully supported and PCI compliant solution is implemented on site with cloud management capabilities to increase reliability and security, integrates seamlessly with existing systems and peripherals, and maximises your existing investment in POS systems.

## About Zynstra

Zynstra enables retailers to deliver superior customer and employee experiences through faster innovation and radically reduces cost to serve in-store. Purpose built for the edge, our powerful software optimizes existing store technology and enables digital transformation.

Zynstra virtualizes back and front office store technology, with intelligent automation to deliver software defined stores. Specific virtualization solutions include Store, POS, mobile POS Tablet, Kiosk, Self-Checkout and Enhanced PCI-DSS Compliance.

Zynstra delivers its patented retail edge software for the world's largest, most distributed, innovation-driven enterprises. With Tier 1 PCI-DSS compliance Zynstra is committed to security excellence at the edge.

Zynstra is backed by Octopus Ventures, one of Europe's leading investors in fast-growth companies, focused on backing unusually talented entrepreneurs.



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